

Environmental Regulatory Impact

Dr. Greg Kunkel

Vice President of Environmental Affairs

Senate Energy Committee

September 25, 2012



Tenaska

- Formed in 1987 – Celebrating 25 years
- Headquartered in Omaha, Nebraska
 - Regional Offices in Dallas, Denver & Calgary
- Employee Owned – more than 700 employees
- Develops, builds, owns, and operates electric generation facilities – natural gas, coal with CCS, solar – 9000 MW
- Markets natural gas, power and biofuels

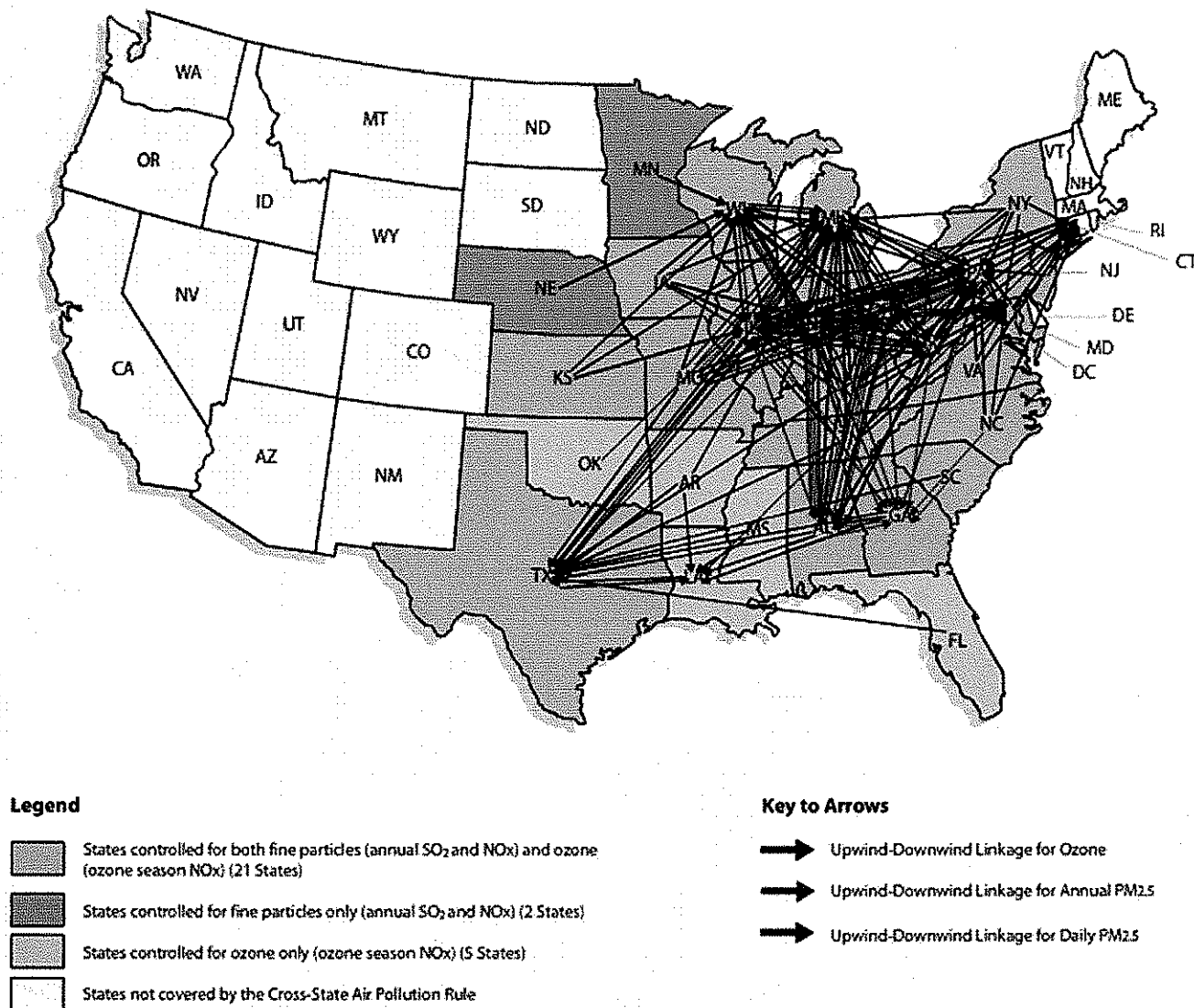
EPA Regulatory Agenda

- Existing Fleet of Coal Units
 - Regional Flexible Trading Programs for SO₂ & NO_x
 - Mercury and Air Toxics Standards
 - Revised Technology Standards
 - Criteria Pollutants
 - Greenhouse Gases
 - Revised Air Quality Standards
 - Coal Combustion Byproducts Rule
 - Water Intake Regulations (316(b) of CWA)
 - Water Discharge Regulations

Regional Trading Programs

- Clean Air Interstate Rule (CAIR)
 - Purpose to address transport of pollutants between states
 - Vacated, then temporarily re-instated, pending EPA Response
- Cross State Air Pollution Rule
 - Vacated by DC Circuit
 - Time should have been allowed for States to develop implementation plans
 - Required reductions not commensurate with identified impacts on downwind non-attainment areas
 - EPA Response not known
- CAIR continues pending EPA response
- Primary Impact: Uncertainty
- Has Cap and Trade Lost its Luster?

CSAPR: Geographic Reach and Linkages



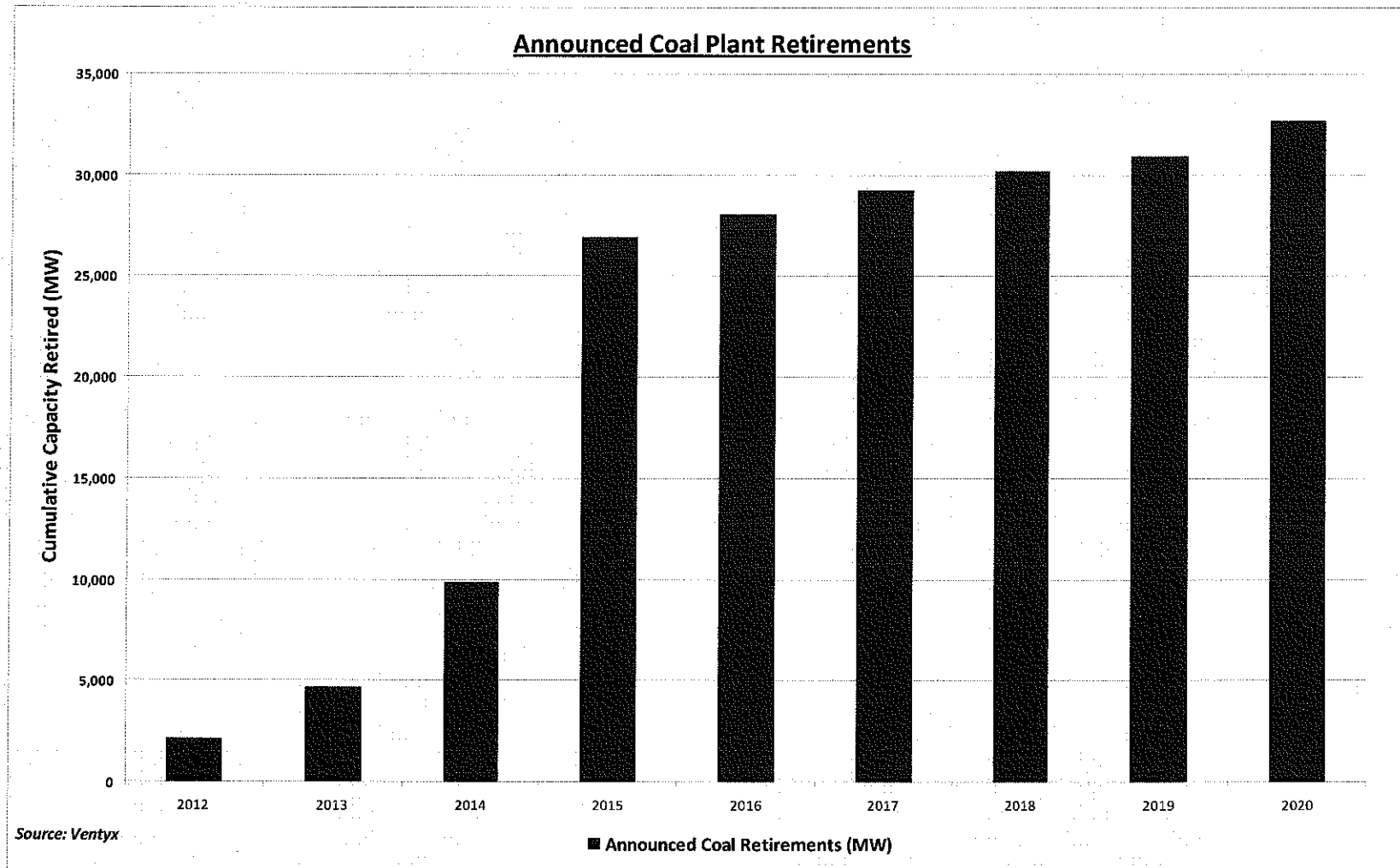
Mercury and Air Toxics Standards

- 1990 Clean Air Act Amendments Require Study
- 2000 EPA Determines Regulation Necessary
- 2005 Clean Air Mercury Rule – Courts Reject
- March 2011 – Proposed MATS Rule
- December 2011 – Final MATS Rule
- Ongoing Legal Challenges to MATS

What will MATS Require?

- Stringent Emission Limits by 2014 - 2015
 - Mercury
 - Fine Particulate Matter
 - Acid Gas (HCl)
- Controls
 - Activated Carbon, Scrubbers, Bag Houses, Sorbents
- Retirement Decisions
 - Older, less efficient, less controlled units most vulnerable

Announced Retirements (US)



EPA Regulatory Agenda

- New Coal Units
 - GHGs added to PSD Permits
 - What is Best Available Control Technology for CO₂?
 - Proposed New Source Performance Standard for CO₂
 - Single (1000 lb/MWh) standard for electric generation
 - No control required for natural gas
 - CCS required for coal
 - H.R. 6172 would prohibit such a standard until CCS is technologically and economically feasible
 - Mercury and Air Toxics Standards for New Sources
 - DC Circuit
 - In abeyance pending EPA reconsideration

Observations

- Cumulative effect of regulation is increased compliance costs and ongoing uncertainty.
- Cap and Trade proposals are not faring well in Court.
- Future EPA proposals may be less flexible, like MATS.
- Emission reductions now ahead of CSAPR goals.
- Scheduled coal plant retirements increase in 2015.
- MATS litigation outcomes in 2013.